A NEW SPECIES OF *NIRVANOPSIS* VANE-WRIGHT (LEPIDOPTERA: NYMPHALIDAE) FROM THE SULA ISLANDS, INDONESIA

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Abstract

Nirvanopsis susah sp. n. is described and figured from Taliabu Island in the Sula Group, near Sulawesi, Indonesia.

Introduction

The genus *Nirvana* Tsukada & Nishiyama was established for the type species *N. hypnus* Tsukada & Nishiyama from Torajaland, central Sulawesi (Tsukada and Nishiyama 1979). As the name *Nirvana* Kirkaldy had been used previously for a genus of leaf hoppers (Hemiptera), Vane-Wright (in Vane-Wright and de Jong 2003) proposed the new name, *Nirvanopsis* Vane-Wright.

The position of *Nirvanopsis* within the satyrine tribe Mycalesini is presently uncertain (e.g. Aoki *et al.* 1982, d'Abrera 1985, Monteiro and Pierce 2001), although Vane-Wright and Fermon (2003) considered this genus to be closest to *Lohora* Moore.

A second species in the genus was collected recently in the Sula group of islands, near Sulawesi, Indonesia. It is described below.

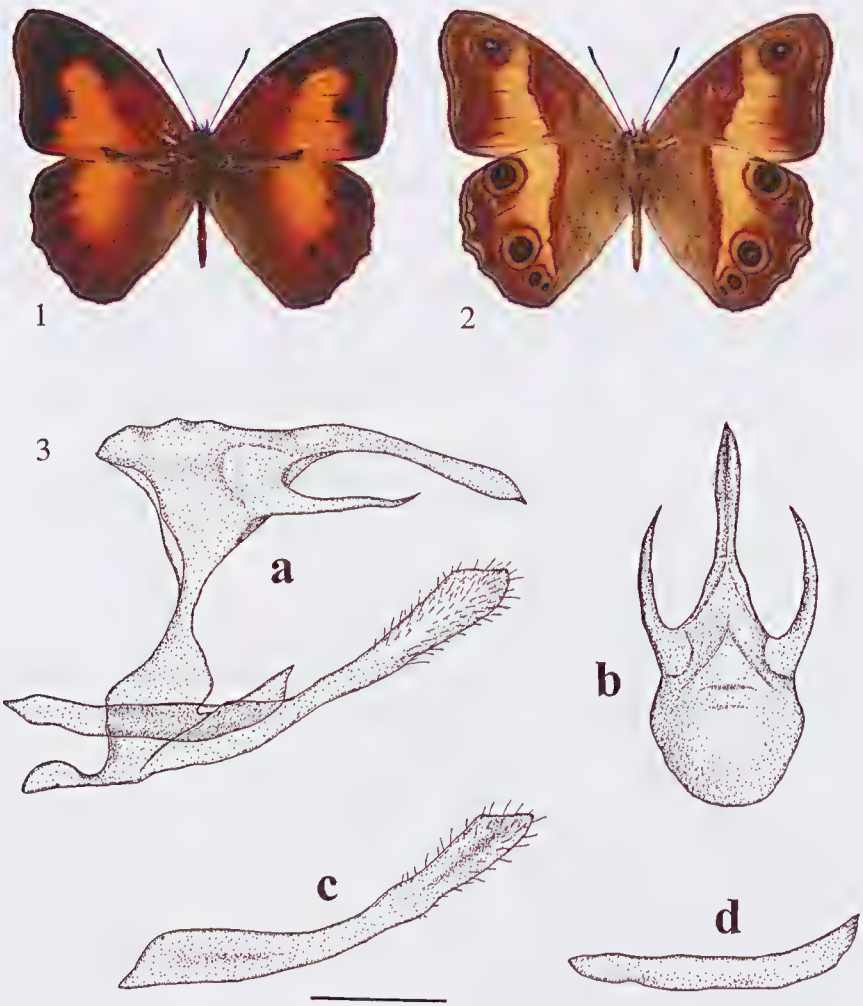
Depositories are abbreviated as follows: AMS – Australian Museum, Sydney; CJMC – Private collection of C. J. Müller, Sydney.

Nirvanopsis susah sp. n.

(Figs 1-3)

Types. Holotype ♂, INDONESIA: central Taliabu Island, 1220 m, Sula Islands, 16.vii.2003, C.J. Müller, genitalia dissected and attached to specimen (in AMS). *Paratype* ♂, same data as holotype (CJMC).

Description. Male (Figs 1-2). Forewing length 29 mm, antenna 12.8 mm. Head dark brown with fine brown hairs, light brown ventrally; antenna black; labial palpus light brown; eyes hairy, orange-brown, narrowly ringed white. Thorax deep brown above, light brown beneath, clothed with fine brown hairs; legs light brown. Abdomen orange-brown above, light brown beneath. Forewing with costa and inner margin slightly bowed, termen convex near apex and slightly falcate near tornus, cubitus and base of vein 1A + 2A swollen, anal vein with median kink and large black sex brand, latter between anal vein and inner margin; above dark brown with cell and basal area deep orange-brown, median area orange from inner margin to just above vein M_3, very poorly defined black spots in postmedian area between veins M_1 and M_2



Figs 1-3. *Nirvanopsis susah* sp. n., male. (1) upperside; (2) underside; (3) genitalia: (a) lateral view; (b) dorsal view; (c) left valva; (d) aedeagus, lateral view. Scale bar = 0.5 mm (Fig. 3 only).

and between veins CuA_1 and CuA_2, very faint black subterminal line parallel to termen, cilia grey-brown; beneath deep red-brown, with pale orange-fawn median band, sharply defined towards base and diffuse toward termen, basal area light brown with red-brown band in centre of cell parallel to termen, discocellulars dark brown, termen narrowly brown-black with parallel subterminal line of similar colouring, separated and bounded by fine cream-brown line, a large black subapical spot, centered white and progressively ringed with orange-brown through to dark brown. Hindwing relatively pronounced at tornus and at vein ends, giving the wings a serrated appearance, grey-brown sex brand at base in radial sector; above orange with outer one-third deep orange-brown, basal half of cell deep grey and inner margin broadly grey-brown, termen narrowly black with a fine subterminal line of similar colouring, parallel to termen, separated and bounded by red-brown, a small subtornal black spot between veins CuA_1 and CuA_2, cilia deep grey; beneath deep red-brown with orange-fawn median band bound by irregular row of white-centered black postmedian spots ringed orange and brown, spots absent between veins CuA_1 and M_2, basal area light brown, termen narrowly grey-black with parallel subterminal line of similar colouring, separated and bound by orange-cream.

Male genitalia (Fig. 3). Tegumen rounded dorsally, uncus sharply pointed and swollen apically, gnathos brachia sharply tapered apically, bowed inwards towards anterior, vinculum narrow in centre, valvae very narrow, club-shaped, saccus short and blunt, aedeagus tapered anteriorly.

Female. Unknown.

Etymology. The Bahasa Indonesian word 'susah' translates as 'difficult' and reflects the obstinate means of reaching the type locality of this new species in the mountains of Taliabu Island.

Comments. Nirvanopsis susah sp. n. is a very distinctive taxon but its sex brand, wing shape and pattern imply its position within *Nirvanopsis*. It differs from *N. hypnus* in several respects, the most obvious being its more typical satyrine colouration of brown and orange, while the latter has an unusual pied colouration. Additionally, *N. susah* is larger than *N. hypnus*, the hindwing termen is less serrated, while the forewing termen is slighly more falcate. The upperside bands of both wings are diffuse in *N. susah* and sharply defined in *N. hypnus*. The sex brand along the inner margin of the forewing upperside is also much larger in *N. susah* when compared with *N. hypnus*. Beneath, the large ocellus in the subtornal area of the forewing of *N. hypnus* is absent in *N. susah* and the pale, triangular submarginal markings on both surfaces of both wings are only vestigial in *N. susah*. The dark subbasal band on the hindwing underside is curved toward the thorax in *N. susah*, while in *N. hypnus* this band swings toward the termen.

N. susah males were taken as they flew about eight metres above the ground in very dense moss forest on an ill-defined ridge summit. They only flew in bright sunshine between 07:00 and 09:00 hours and were not seen outside these times. Adults always settled head downwards on leaves growing close to large tree trunks, from where they exhibited territorial behaviour, and while in flight resembled *Vagrans egista* (Stoll) (Nymphalidae).

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